UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,109	06/29/2006	Henk Mosseveld	WAS0726PUSA	4337
22045 BROOKS KUS	7590 04/30/201 ¹ HMAN P.C.	EXAMINER		
1000 TOWN C	ENTER		REDDY, KARUNA P	
TWENTY-SEC SOUTHFIELD,	= = =		ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			04/30/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)	Applicant(s)	
		10/551,109	MOSSEVELD E	MOSSEVELD ET AL.	
		Examiner	Art Unit		
		KARUNA P. REDDY	1796		
Period fo	The MAILING DATE of this communication or r Reply	appears on the cover sh	eet with the correspondence a	ddress	
A SHO WHIC - Exter after - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR REIGHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory per re to reply within the set or extended period for reply will, by state ply received by the Office later than three months after the mand patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMN 1.136(a). In no event, however, iod will apply and will expire SIX of tute, cause the application to bed	MUNICATION. may a reply be timely filed 6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).	·	
Status					
2a)⊠	Responsive to communication(s) filed on <u>05</u> This action is FINAL . 2b) T Since this application is in condition for allow closed in accordance with the practice under	his action is non-final. wance except for forma	• •	ne merits is	
Dispositi	on of Claims				
5) 6) 7) 8)	Claim(s) <u>20-39</u> is/are pending in the applica 4a) Of the above claim(s) is/are without Claim(s) is/are allowed. Claim(s) <u>20-39</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	Irawn from consideratic			
	on Papers				
10)	The specification is objected to by the Exam The drawing(s) filed on is/are: a) a a Applicant may not request that any objection to the Replacement drawing sheet(s) including the contraction of the oath or declaration is objected to by the	accepted or b) object he drawing(s) be held in a rection is required if the dr	abeyance. See 37 CFR 1.85(a). awing(s) is objected to. See 37 C	, ,	
Priority u	ınder 35 U.S.C. § 119				
a)[Acknowledgment is made of a claim for fore All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bur see the attached detailed Office action for a	ents have been receive ents have been receive riority documents have eau (PCT Rule 17.2(a))	d. d in Application No been received in this Nationa	ıl Stage	
Attachmen	t(s) e of References Cited (PTO-892)	4\ □ Inte	rview Summary (PTO-413)		
2) Notic Notic Inforr	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	Pap 5) 🔲 Not	er No(s)/Mail Date ice of Informal Patent Application er:		

Art Unit: 1796

DETAILED ACTION

1. This office action is in reference to the amendment filed 2/5/2010. Claims 1-19 are cancelled. Accordingly, claims 20-39 are currently pending in the application.

Given that no amendments are made and the grounds of rejection remain unchanged from that set forth in the preceding office action, it is proper to make this action final.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

 Claims 20-27, 29-31, 34-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998).

The rejection is adequately set forth in paragraph 3 of office action mailed 11/5/2009.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 31 above, in view of Miyamoto et al (JP 2002-020601).

The rejection is adequately set forth in paragraph 4 of office action mailed 11/5/2009.

Art Unit: 1796

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 27 above, and further in view of Famili et al (5,362,778).

The rejection is adequately set forth in paragraph 5 of office action mailed 11/5/2009.

6. Claims 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 31 above, and further in view of Hashemzadeh et al (US 2002/0135086 A1).

The rejection is adequately set forth in paragraph 6 of office action mailed 11/5/2009.

Response to Arguments

7. Applicant's arguments filed 2/5/2010 have been fully considered but they are not persuasive. Specifically, applicant argues that (A) the final form of polymers brought into contact with starch is an aqueous dispersion. Ritter's process does not involve a composition which contains both starch and redispersible polymer *powder* (emphasis added by applicant); (B) Wendel's polymer dispersion is essentially a homogenized polymer solution stabilized by the starch degradation products such as sugared products. In contrast Ritter's polymer dispersion is essentially a two-phase dispersion, formed of water phase and water-insoluble polymer phase. Hence, the availability and accessibility of water essential for starch digestion, in Ritter, is potentiated by the water insolubility of Ritter's polymers; (C) Wendel's teaching of redispersible polymer powder

Art Unit: 1796

cannot be isolated from Wendel's as a whole, nor can Wendel be combined with Ritter in total disregard for the salient features that are drastically different between Wendel and Ritter.

With respect to (A), Graham v. Deere analysis was made and motivation to bring in teachings from secondary reference of Wendel to use polymer in the form of redispersible polymer powder was articulated clearly in paragraph 3 of office action mailed 11/5/2009.

With respect to (B), firstly, both are directed to compositions comprising starch as well as polymers instantly claimed. Secondly, Ritter et al disclose materials based on starch which is thermomechanically digested at elevated pressures and temperatures and with the addition of <u>water and/or lower molecular weight plasticizing agents</u>. Hence, it is clear that starch, in an alternative embodiment, is thermomechanically digested with the addition of <u>lower molecular weight plasticizing agents</u> and does not require water.

With respect to (C), as stated earlier, Wendel is only used for its teaching that polymer dispersions comprising functionalized monomers provide increased internal strength, are redispersible (i.e. can be dispersed in water at a later stage) and the redispersible powder provides for ease of handling, storage and transportation. Case law holds that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 1796

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./ Examiner, Art Unit 1796

/Vasu Jagannathan/ Supervisory Patent Examiner, Art Unit 1796